

REMARKS

Claims 1-5 and 7-18 were pending in this application, with claims 1, 8, 13 and 18 being in independent form. Claim 6 was previously canceled. By this Amendment, new dependent claim 19 has been added, and independent claims 1, 8, 13 and 18 have been amended to clarify the claimed invention without narrowing the scope thereof. It is submitted that no new matter has been added by the present amendment. Support for the claims amendments and new claim 19 can be found in the application at, for example, page 11, lines 8-11, and in Fig. 2. Accordingly, claims 1-5 and 7-19 are now pending in this application.

Claims 1, 7, 8, 13 and 18 were rejected under 35 U.S.C. § 102(b) or § 102(e) as allegedly anticipated by U.S. Patent No. 5,638,354 to Nakayama et al., or under 35 U.S.C. § 103(a) as purportedly obvious over Nakayama in view of U.S. Patent No. 5,666,345 to Takahashi et al. or Japanese patent application publication number 11-066630 ( "the '630 reference"), Claims 2, 3, 9-11 and 15 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Nakayama in view of U.S. Patent 5,477,527 to Tsuchiya et al. Claims 2-5, 9-12 and 14-17 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Nakayama in view of U.S. Patent 5,673,250 to Mieda et al. or U.S. Patent 5,459,712 to Sugaya et al. Claims 1, 8, 13 and 18 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over the '630 reference. Claims 2-5, 9-12 and 14-17 were rejected under 35

U.S.C. §103(a) as allegedly unpatentable over the '630 reference in view of Mieda et al. or Sugaya et al.

Applicants have carefully considered the May 10, 2004 Office Action and the cited art, and respectfully submit that independent claims 1, 8, 13 and 18 are patentable over the cited art, for at least the following reasons.

This application relates to an optical information recording medium which is not substantially affected by cross-talk even when phase pits exist on the lands situated at the right and left sides of a groove and in which the phase pit signal is not degraded by information marks.

Applicants devised such an optical information recording medium which has the features that (a) a phase pit encoding preformat information for a first groove is radially connected with another groove adjoining on a side of the pit relative to the first groove, and (b) a partition wall is formed in a radial direction between the phase pit and the first groove, so that the first phase pit is not connected to the first groove. More specifically, the first phase pit encodes preformat information for the first groove, is connected to said another groove, does not encode preformat information for said another groove and is not connected to said first groove. These features are described in each of independent claims 1, 8, 13 and 18.

The cited art does not disclose or suggest the claimed invention.

Nakayama, as understood by Applicants, is directed to an optical information recording medium having pregrooves and prepits for tracking formed in different positions of central lines. The Office Action cites Figure 3 of Nakayama and in particular groove 103 as disclosing the adjoining groove described in the claims.

According to Nakayama, a centerline for a series of prepits 104 storing preformat information for the groove 103 is offset by one quarter of the track pitch from the centerline of the groove 103. However, as shown in Fig. 3 of Nakayama, the prepits 104 are connected with the groove 103

Applicants find no teaching or suggestion in Nakayama a first phase pit which encodes preformat information for a first groove, is connected to another groove, does not encode preformat information for said another groove and is not connected to the first groove. Nakayama simply does not teach or suggest that the first groove and the first prepit storing preformat information for the first groove can be placed in a disconnected configuration in order to avoid cross-talk when phase pits exist on the lands situated at the right and left sides of the groove and to avoid degradation of the phase pit signal by information marks.

The other cited references do not cure the deficiencies of Nakayama.

Takahashi was cited in the Office Action as purportedly

disclosing an optical memory disc medium with predetermined guide tracks and prepits which have depths equal to that of a track depth.

Tsuchiya was cited in the Office Action for its disclosure of an optical disc having specific track pitch, spot size and pit width values.

Mieda was cited in the Office Action as disclosing optical records having a plurality of pit formats available for maximizing system parameters, such as crosstalk reduction and increasing recording density. The Office Action states also that Figs. 3-5 of Mieda provide for a variety of parameters to be varied.

Sugaya, like Mieda, is cited in the Office Action as purportedly disclosing optical records having a plurality of pit formats available for maximizing system parameters, such as crosstalk reduction and increasing recording density.

Yamaoka, as understood by Applicants, is directed to an optical disc wherein a prepit formed on a land is disposed in a manner shifted from a centerline of the land, but overlaps the groove with which the prepit is paired. According to Yamaoka, the prepit does not overlap adjacent grooves or information tracks.

Applicants find no disclosure or suggestion, however, in the cited art mentioned above of an optical information recording medium comprising (a) a phase pit encoding preformat information

for a first groove is radially connected with another groove adjoining on a side of the pit relative to the first groove, and (b) a partition wall is formed in a radial direction between the phase pit and the first groove, wherein the first phase pit which encodes preformat information for the first groove, is connected to another groove, does not encode preformat information for said another groove and is not connected to the first groove, as provided by the claimed invention of this application.

Since the cited art does not disclose or suggest each and every feature of the claimed invention, it does not render the claimed invention unpatentable.

In addition, the '630 reference was cited by the Office Action. The '630 reference is a publication of Japanese application no. 09-230696 filed August 27, 1997. The present application is a continuation-in-part, and claims priority of, U.S. application Serial No. 09/140,975 filed August 27, 1998. Attached as Exhibit A hereto is a copy of the official filing receipt for Serial No. 09/140,975 which indicates that Serial No. 09/140,975 claims priority from Japanese application no. 09-230696. Therefore, this application is entitled to the priority of Japanese application no. 09-230696, and the the '630 reference is not prior art to this application.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 1, 8, 13 and 18 as amended, and the claims depending therefrom, are

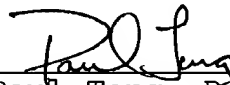
patentable over the cited art.

If a petition for a further extension of time is required to make this amendment timely, this paper should be considered to be such a petition. The Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Allowance of this application is respectfully requested.

Respectfully submitted,

  
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